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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,156	08/21/2001	David Roth Rigney		7387

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EXAMINER

LY, CHEYNE D

ART UNIT

PAPER NUMBER

1631

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/934,156	Applicant(s) RIGNEY, DAVID ROTH	
	Examiner Cheyne D. Ly	Art Unit 1631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/07/04; 3/21/05. 10/20/2003
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 2-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-6 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/07/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicants' arguments filed July 07, 2004 have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.
2. The withdrawal of claims 2-6 has been acknowledged.
3. Claim 1 is examined on the merits.

OBJECTIONS

4. The amendments filed October 20, 2003 and July 07, 2004 are objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:
 - a. Item 7 introduces new matter to the specification because as originally filed the disclosure is directed to "genes on a microarray." The proposed amendment is directed to "clusters of genes are characterized automatically."
 - b. Item 17 introduces new matter to the specification because as originally filed the disclosure is directed to "generate quantitative indices." The proposed amendment is directed to "generate words or phrases."
5. The following is directed to the amendment, filed October 20, 2003, wherein the proposed amendment is different from the disclosure as original filed:
 - a. Item 7 introduces new matter to the specification because as originally filed the disclosure is directed to "genes on a microarray." The proposed amendment is directed to "clusters of genes are characterized automatically."
 - b. Item 17 introduces new matter to the specification because as originally filed the disclosure is directed to "generate quantitative indices." The proposed amendment is directed to "generate words or phrases."

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- c. Item 18 introduces new matter to the specification because as originally filed the disclosure is directed to “quantitative indices.” The proposed amendment is directed to “descriptors.”
 - d. Item 19 introduces new matter to the specification because as originally filed the disclosure is directed to “automatic analysis of the quality of clustering.” The proposed amendment is directed to “automatic generation of key words or phrases for each cluster.”
 - e. Item 20 introduces new matter to the specification because as originally filed the disclosure is directed to “for genes.” The proposed amendment is directed to “for each cluster.”
 - f. Item 24 introduces new matter to the specification because as originally filed the disclosure does not require “storing them in the Omim Web Pages.” The proposed amendment requires “storing them in the Omim Web Pages.”
 - g. Item 32 introduces new matter to the specification because as originally filed the disclosure is directed to the “Upon completion of these steps by the Data Summarization Module” and “It displays the key words or phrases.” The proposed amendment is directed to “Upon completion of these steps” wherein the steps are generic. Further, the proposed amendment requires “displays the key words or phrases that were generated in accordance with the rainbow options that had been selected.”
6. The following is directed to the amendment, filed July 07, 2004, wherein the proposed amendment is different from the disclosure as original filed:

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- a. Item 17 introduces new matter to the specification because as originally filed the disclosure does not comprise the proposed disclosure of
“although...classification.”
- b. Item 18 introduces new matter to the specification because as originally filed the disclosure does not comprise the proposed disclosure of “(It should...text
classification).”
- c. Item 19 introduces new matter to the specification because as originally filed the disclosure does not comprise the proposed disclosure of “There is little prior
art...from microarray experiments.”

7. Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. NEW MATTER REJECTION.

10. The instant rejection has been necessitated by claim amendments.

11. The following limitations have not been found in the instant specification:

- a. The limitation of “simultaneously...that also distinguish each subset from the other subset” (lines 1-3) is not present in the instant specification. It is noted that the instant specification discloses the “Clustering of Microarray Data” (pages 26-36) however, said disclosure does not provide written description basis for the new limitations, as originally filed.
- b. The limitation of “gene that generally have not sequence similarities among them” (line 4) is not present in the instant specification.
- c. The limitation of “the computer program Rainbow that are intended to simultaneously...to distinguish each cluster from the others” (lines 14-15) is not present in the instant specification. It is noted that Applicant describes in the Rainbow computer program as directed Text Modeling; however, said disclosure does not provide written description basis for the new limitations, as originally filed.

CLAIM REJECTIONS - 35 U.S.C. § 112, SECOND PARAGRAPH

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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14. The instant rejection has been necessitated by claim amendments.

15. Lines 3 recites the limitation of “the other subsets”, line 16 recites “the others”, and lines 24-25 recite “the other clusters” wherein the antecedent basis for the respective limitation is not clear. The metes and bounds of the limitation is not clear because claim 1 does not recite limitation which could reasonably be construed as defining “other subsets”, “the others”, or “the other clusters.” Therefore, the limitation of “distinguish each subset from the other subsets”, “the others”, or “the other clusters”, respectively, causes claim 1 to be vague and indefinite because it is not clear as to what suitability characteristic is being evaluated to distinguish a “characterized each subset” from the “other subsets”, “the others”, or “the other clusters.”

16. Line 4 recites the limitation of “generally have no sequence similarities among them” causes claim 1 to be vague and indefinite because it is not clear whether the limitation of “no sequence similarities” occurs all the time or occasionally. Clarification of the metes and bounds is requires.

17. Step (c) recites “a set of literature documents” in line 6, and “a set of documents” in line 7 which causes claim 1 to be vague and indefinite because it is not clear step (c) is directed to two set of documents or one. Further, step (d) is vague and indefinite because the antecedent basis for the limitation of “the documents” in line 11 is not clear. Are “the documents” directed to “a set of literature documents” in line 6, or “a set of documents” in line 7?

CONCLUSION

18. Applicant's Declaration and arguments have been fully considered. The 35 U.S.C. 103(a) rejection Andrade et al. (1999) and McCallum (1998) has been withdrawn as necessitated by claim amendments.

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

20. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

21. This application contains claims 2-6 drawn to an invention nonelected, October 20, 2003. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

22. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547. The USPTO's official fax number is (571) 273-8300.

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23. Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

24. For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Dune Ly, whose telephone number is (571) 272-0716. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

26. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, Ph.D., can be reached on (571) 272-0718.

C. Dune Ly / *CDL*

6/13/05

Ardin H. Marschel 6/18/05
ARDIN H. MARSCHEL
SUPERVISORY PATENT EXAMINER